

## **METHOD AND APPARATUS OF DETECTING ISI/ICSI IN AN OFDM**

### **SYSTEM**

Appl. No. : 10/710,541 Confirmation No. 4540  
Applicant : Chun-Ming Cho,  
Kuang-Yu Yen  
Filed : July 20, 2004  
TC/A.U. : 2611  
Examiner : SINGH,  
HIRDEPAL  
Docket No. : REAP0132USA  
Customer No. : 27765

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

### **DECLARATION UNDER 37 C.F.R. §1.131**

Dear Sir,

Chun-Ming Cho and Kung-Yu Yen, the applicants in the above-identified patent application, hereby declare and state as follows:

1. We are employees of Realtek Semiconductor Corp., which is the owner/assignee of the above-identified present application, and we are the inventors of the above-identified patent application.
2. We are advised that the U.S. Patent & Trademark Office has tentatively rejected certain claims of this application, based on U.S. patent application US Pub. No. 2005/0276340 (hereafter the '340 application), which was filed with the U.S.

Patent & Trademark Office on Jun. 9, 2004.

3. We are further advised that the '340 application should be removed from consideration, if we invented the claimed embodiments of this application before the filing date of the '340 application.
4. We are further advised that we are considered to have invented this invention before Jun. 9, 2004, so long as we had conceived the embodiments claimed in this application before that date, and diligently pursued the preparation and filing of this application (from at least a time before Jun. 9, 2004, until the application was filed with the U.S. Patent & Trademark Office).
5. Based on these understandings, we set forth the following facts to assist the U.S. Patent Examiner in the examination of this application.
6. Prior to March 19, 2004, we had the inventive idea in mind and then started working on establishing a definite and permanent idea of the complete and operative invention.
7. After completing a written description of the invention disclosure, we authorized Winston Hsu, Patent Agent No. 41,526, to prepare and file patent applicant(s) based on features included in the written description of the invention disclosure, as evidenced by Exhibit A and Exhibit B attached hereto. Exhibit A includes a communication record between a firm of the above-identified patent agent, North America International Patent Office, and an assignee of the instant patent application (U.S. Patent Application No. 10/710,541), Realtek Semiconductor Corp., which was mailed on March 19, 2004 and included the written description of the invention disclosure, 93A-023.doc, as an attachment. Exhibit B shows the written description of the invention disclosure, 93A-023.doc, possessed by us.
8. After the written description of the invention disclosure was provided to the above-identified patent agent for careful review and study, an assistant authorized under direct supervision of the above-identified patent agent and co-worked with the above-identified patent agent in preparing the instant patent application was invited to attend a patent discussion meeting held at a conference room of the assignee of the instant patent application on March 25, 2004, as evidence by Exhibit C attached hereto. Exhibit C includes a communication record between the firm of above-identified patent

agent and the assignee of the instant patent application, showing that the patent discussion meeting was scheduled on March 25, 2004.

9. On May 31, 2004, a draft of a related patent application (U.S. patent application No. 10/710,539, filed on July, 20, 2004) based on the same written description of the invention disclosure evidenced by Exhibit B was finished by above-identified patent agent and the co-working assistant under his direct supervision, as evidenced by Exhibit D and Exhibit E attached hereto. Exhibit D includes a communication record between the firm of the above-identified patent agent and the assignee of the instant patent application, which was mailed on March 31, 2004 and included the draft of the related patent application of the instant patent application, REAP0087USA0.doc, as an attachment. Exhibit E shows the contents of the draft of the related patent application, REAP0087USA0.doc.
10. As evidenced by Exhibit F, Exhibit G, and Exhibit H attached hereto, a revised version of the draft of the related patent application was sent to above-identified patent agent and his assistant under direct supervision on June 14, 2004; in addition, a proposed draft of the instant patent applicant, derived from the revised version of the draft of the related patent application and having the same specification part included in the related patent application, was provided, and the above-identified patent agent and his assistant under direct supervision were instructed to start preparing a draft of the instant patent applicant according to the proposed draft, and then file the instant patent applicant and the related patent application on the same day. The related patent application (U.S. patent application No. 10/710,539) and the instant patent application (U.S. patent application No. 10/710,541) were both filed on July, 20, 2004, where the related patent application and the instant patent application contain the same specification but claim different subject matters supported by the same specification. Exhibit F includes a communication record between the firm of the above-identified patent agent and the assignee of the instant patent application, which was mailed on June 14, 2004 and included the revised version of the draft of the related patent application, 93A-013USD1B.doc, and the proposed draft of the instant patent applicant, 93A-117USD1B.doc. Exhibit G shows the contents of the revised version of the draft of the related patent application, 93A-013USD1B.doc. Exhibit H shows the proposed draft of the instant patent applicant, 93A-117USD1B.doc.

11. On June 23, 2004, a draft of the instant patent application based on the written description of the invention disclosure evidenced by Exhibit B and the proposed draft evidenced by Exhibit H was finished by above-identified patent agent and his assistant under direct supervision, as evidenced by Exhibit I and Exhibit J attached hereto. Exhibit I includes a communication record between the firm of the above-identified patent agent and the assignee of the instant patent application, which was mailed on June 23, 2004 and included the draft of the instant patent application, REAP0132USA0.doc, as an attachment. Exhibit J shows the contents of the draft of the instant patent application, REAP0132USA0.doc.
12. On June 25, 2004, a finalized version of the draft of the instant patent application was confirmed and the above-identified patent agent was instructed to file the instant patent application to U.S. Patent & Trademark Office based on the finalized patent application draft, as evidenced by Exhibit K and Exhibit L attached hereto. Exhibit K includes a communication record between the firm of the above-identified patent agent and the assignee of the instant patent application, which was mailed on June 25, 2004 and included the finalized draft of the instant patent application, REAP0132USA0.doc, as an attachment. Exhibit L shows the contents of the finalized draft of the instant patent application, REAP0132USA0.doc.
13. Documents, COMBINED DECLARATION AND POWER OF ATTORNEY and ASSIGNMENT OF INVENTION, were signed by us on July 14, 2007, and then immediately mailed to the above-identified patent agent acting as our representative before U.S. Patent & Trademark Office; and then the instant patent application was filed to U.S. Patent & Trademark Office on July 20, 2004. The date of signing is evidenced on the submitted documents, COMBINED DECLARATION AND POWER OF ATTORNEY and ASSIGNMENT OF INVENTION.
14. We declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued hereon.

Date: 2008.3.14

Cho, Chun-Ming  
Chun-Ming Cho

Date: 2008.3.14

Kung-Yu Yen  
Kung-Yu Yen